

CHAPTER V

MODEL ORDINANCES

**CHESAPEAKE BAY
PRESERVATION AREA
OVERLAY DISTRICT**

Article I.
Chesapeake Bay Preservation Area Overlay District

Section 100. Title.

This ordinance shall be known and referenced as the "Chesapeake Bay Preservation Area Overlay District" of the [jurisdiction name].

Section 101. Findings of Fact.

The Chesapeake Bay and its tributaries is one of the most important and productive estuarine systems in the world, providing economic and social benefits to the citizens of [jurisdiction name] and the Commonwealth of Virginia. The health of the Bay is vital to maintaining [jurisdiction name's] economy and the welfare of its citizens.

The Chesapeake Bay waters have been degraded significantly by many sources of pollution, including nonpoint source pollution from land uses and development. Existing high quality waters are worthy of protection from degradation to guard against further pollution. Certain lands that are proximate to shorelines have intrinsic water quality value due to the ecological and biological processes they perform. Other lands have severe development constraints from flooding, erosion, and soil limitations. With proper management, they offer significant ecological benefits by providing water quality maintenance and pollution control, as well as flood and shoreline erosion control. These lands together, designated by the [governing body] as Chesapeake Bay Preservation Areas (hereinafter "CBPAs"), need to be protected from destruction and damage in order to protect the quality of water in the Bay and consequently the quality of life in [jurisdiction name] and the Commonwealth of Virginia.

Section 102. Purpose and Intent.

A. This ordinance is enacted to implement the requirements of Section 10.1-2100 *et seq.* of the Code of Virginia, the Chesapeake Bay Preservation Act, and amends the [title of zoning code]. The intent of [governing body] and the purpose of the Overlay District is to: (1) protect existing high quality state waters; (2) restore all other state waters to a condition or quality that will permit all reasonable public uses and will support the propagation and growth of all aquatic life, which might reasonably be expected to inhabit them; (3) safeguard the clean waters of the Commonwealth from pollution; (4) prevent any increase in pollution; (5) reduce existing pollution; and (6) promote water resource conservation in order to provide for the health, safety, and welfare of the present and future citizens of [jurisdiction name].

B. This district shall be in addition to and shall overlay all other zoning districts where they are applied so that any parcel of land lying in the Chesapeake Bay Preservation Area Overlay District shall also lie in one or more of the other zoning districts provided for by the Zoning Ordinance. Unless otherwise stated in the Overlay District, the review and approval procedures provided for in Sections [reference local site plan, erosion and sediment control, grading permits, & building permits ordinances, etc.] shall be followed in reviewing and approving development, redevelopment, and uses

governed by this Article.

C. This Article is enacted under the authority of Section 10.1-2100 *et seq.* (The Chesapeake Bay Preservation Act) and Section 15.1-489, of the Code of Virginia. Section 15.1-489 states that zoning ordinances may “also include reasonable provisions, not inconsistent with applicable state water quality standards, to protect surface water and groundwater as defined in Section 62.1-44.85 (8).”

Section 103. Definitions.

The following words and terms used in the Overlay District have the following meanings, unless the context clearly indicates otherwise. Words and terms not defined in this Article but defined in the Zoning Ordinance shall be given the meanings set forth therein.

“Agricultural lands” mean those lands used for the planting and harvesting of crops or plant growth of any kind in the open; pasture; horticulture; dairying; floriculture; or raising of poultry and/or livestock.

“Best Management Practices” (BMPs) mean a practice, or a combination of practices, that is determined by a state or designated area wide planning agency to be the most effective, practical means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

“Buffer area” means an area of natural or established vegetation managed to protect other components of a Resource Protection Area and state waters from significant degradation due to land disturbances.

“Chesapeake Bay Preservation Area” means any land designated by the [governing body] pursuant to Part III of the Chesapeake Bay Preservation Area Designation and Management Regulations, VR 173-02-01, and Section 10.1-2107 of the Code of Virginia. A Chesapeake Bay Preservation Area shall consist of a Resource Protection Area and a Resource Management Area.

“Construction footprint” means the area of all impervious surface, including but not limited to, buildings, roads and drives, parking areas, and sidewalks and the area necessary for construction of such improvements.

“Development” means the construction, or substantial alteration, of residential, commercial, industrial, institutional, recreation, transportation, or utility facilities or structures.

“Diameter at breast height” means the diameter of a tree measured outside the bark at a point 4.5 feet above ground.

“Dripline” means a vertical projection to the ground surface from the furthest lateral extent of a tree’s leaf canopy.

“Impervious cover” means a surface composed of any material that significantly impedes or prevents natural infiltration of water into the soil. Impervious surfaces include, but are not limited to: roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface.

“Intensely Developed Areas” means a portion of a Resource Protection Area or a Resource Management Area designated by the [governing body] where development is concentrated and little of the

natural environment remains.

"Nonpoint source pollution" means pollution consisting of constituents such as sediment, nutrients, and organic and toxic substances from diffuse sources, such as runoff from agriculture and urban land development and use.

"Nontidal wetlands" mean those wetlands other than tidal wetlands that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined by the U.S. Environmental Protection Agency pursuant to Section 404 of the federal Clean Water Act, in 33 C.F.R. 328.3b, dated November 13, 1986.

"Noxious Weeds" means weeds that are difficult to control effectively, such as Johnson Grass, Kudzu, and multiflora rose.

"Plan of Development" means the process for site plan or subdivision plat review to ensure compliance with Section 10.1-2109 of the Code of Virginia and this Article, prior to any clearing or grading of a site or the issuance of a building permit.

"Redevelopment" means the process of developing land that is or has been previously developed.

"Resource Management Area (RMA)" means that component of the Chesapeake Bay Preservation Area that is not classified as the Resource Protection Area. RMAs include land types that, if improperly used or developed, have the potential for causing significant water quality degradation or for diminishing the functional value of the Resource Protection Area.

"Resource Protection Area (RPA)" means that component of the Chesapeake Bay Preservation Area comprised of lands at or near the shoreline that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters.

"Tidal shore" or "shore" means land contiguous to a tidal body of water between the mean low water level and the mean high water level.

"Tidal wetlands" means vegetated and nonvegetated wetlands as defined in Section 62.1-13.2 of the Code of Virginia.

"Tributary stream" means any perennial stream that is so depicted on the most recent U.S. Geological Survey 7-1/2 minute topographic quadrangle map (scale 1:24,000).

"Water-dependent facility" means a development of land that cannot exist outside of the Resource Protection Area and must be located on the shoreline by reason of the intrinsic nature of its operation. These facilities include, but are not limited to (i) ports; (ii) the intake and outfall structures of power plants, water treatment plants, sewage treatment plants, and storm sewers; (iii) marinas and other boat docking structures; (iv) beaches and other public water-oriented recreation areas; and (v) fisheries or other marine resources facilities.

"Wetlands" means tidal and nontidal wetlands.

Section 104. Areas of Applicability.

A. The Chesapeake Bay Preservation Area Overlay District shall apply to all lands identified as CBPAs as designated by the [governing body] and as shown on the [local adopted map]. The [adopted map], together with all explanatory matter thereon, is hereby adopted by reference and declared to be a part of this Article.

(1) The Resource Protection Area includes:

- a. Tidal wetlands;
 - b. Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or tributary streams;
 - d. [Other lands] (specified as an RPA feature at local discretion);
 - c. Tidal shores;
 - e. A 100-foot vegetated buffer area located adjacent to and landward of the components listed in subsections a. through d. above, and along both sides of any tributary stream.
- (2) The Resource Management Area is composed of concentrations of the following land categories: floodplains; highly erodible soils, including steep slopes; highly permeable soils; nontidal wetlands not included in the Resource Protection Area; other lands including [those local features] necessary to protect the quality of state waters.

B. The [adopted map] shows the general location of CBPAs and should be consulted by persons contemplating activities within [jurisdiction name] prior to engaging in a regulated activity.

C. Portions of Resource Protection Areas and Resource Management Areas designated by the [governing body] as Intensely Developed Areas shall serve as redevelopment areas. Areas so designated shall comply with all erosion and sediment control requirements and the performance standards for redevelopment in Section 110 (Performance Standards.)

D. If the boundaries of a Chesapeake Bay Preservation Area include a portion of a lot, parcel, or development project, the entire lot, parcel, or development project shall comply with the requirements of the Overlay District. The division of property shall not constitute an exemption from this requirement.

Section 105. Use Regulations.

Permitted uses, special permit uses, accessory uses, and special requirements shall be as established by the underlying zoning district, unless specifically modified by the requirements set forth

herein.

Section 106. Lot Size.

Lot size shall be subject to the requirements of the underlying zoning district(s), provided that any lot shall have sufficient area outside the Resource Protection Area to accommodate an intended development, in accordance with the performance standards in Section 110, when such development is not otherwise allowed in the Resource Protection Area.

Section 107. Required Conditions.

A. All development and redevelopment exceeding 2500 square feet of land disturbance shall be subject to a plan of development process, including the approval of a site plan in accordance with the provisions of the Zoning Ordinance or a subdivision plat in accordance with the Subdivision Ordinance.

B. Development in Resource Protection Areas may be allowed only if it: (i) is water-dependent; or (ii) constitutes redevelopment.

C. A water quality impact assessment shall be required for any proposed development or redevelopment within Resource Protection Areas and for any development within Resource Management Areas when required by the [Administrative Authority] because of the unique characteristics of the site or intensity of development, in accordance with the provisions of Section 111, of this Article.

Section 108. Conflict with other Regulations.

In any case where the requirements of this Article conflict with any other provision of the [jurisdiction name] Code or existing state or federal regulations, whichever imposes the more stringent restrictions shall apply.

Section 109. Interpretation of Resource Protection Area Boundaries.

A. Delineation by the Applicant.

The site-specific boundaries of the Resource Protection Area shall ordinarily be determined by the applicant through the performance of an environmental site assessment, subject to approval by the [Administrative Authority] and in accordance with Section 112, (Plan of Development) of this Article. The [adopted map] shall be used as a guide to the general location of Resource Protection Areas.

B. Delineation by the [Administrative Authority].

The [Administrative Authority], when requested by an applicant wishing to construct a single family residence, may waive the requirement for an environmental site assessment and perform the delineation. The [Administrative Authority] may use remote sensing, hydrology, soils, plant species, and other data, and consult other appropriate resources as needed to perform the delineation.

C. Where Conflict Arises Over Delineation.

Where the applicant has provided a site-specific delineation of the Resource Protection Area, the [Administrative Authority] will verify the accuracy of the boundary delineation. In determining the site-specific RPA boundary, the [Administrative Authority] may render adjustments to the applicant's boundary delineation, in accordance with Section 112, (Plan of Development) of this Article. In the event the adjusted boundary delineation is contested by the applicant, the applicant may seek relief, in accordance with the provisions of Section 112.H. (Denial/Appeal of Plan)

Section 110. Performance Standards.

A. Purpose and Intent.

The performance standards establish the means to minimize erosion and sedimentation potential, reduce land application of nutrients and toxics, and maximize rainwater infiltration. Natural ground cover, especially woody vegetation, is most effective in holding soil in place and preventing site erosion. Indigenous vegetation, with its adaptability to local conditions without the use of harmful fertilizers or pesticides, filters stormwater runoff. Keeping impervious cover to a minimum enhances rainwater infiltration and effectively reduces stormwater runoff potential.

The purpose and intent of these requirements is also to implement the following objectives: prevent a net increase in nonpoint source pollution from new development; achieve a 10% reduction in nonpoint source pollution from redevelopment; and achieve a 40% reduction in nonpoint source pollution from agricultural uses.

B. General Performance Standards for Development and Redevelopment.

- (1) Land disturbance shall be limited to the area necessary to provide for the desired use or development.
 - a. In accordance with an approved site plan, the limits of land disturbance, including clearing or grading shall be strictly defined by the construction footprint. These limits shall be clearly shown on submitted plans and physically marked on the development site.
 - b. The construction footprint shall not exceed 60% of the site.
 - c. Ingress and egress during construction shall be limited to one access point, unless otherwise approved by the [Administrative Authority].

- (2) Indigenous vegetation shall be preserved to the maximum extent possible consistent with the use and development permitted and in accordance with the Virginia Erosion and Sediment Control Handbook.
 - a. Existing trees over 6 inches diameter at breast height (DBH) shall be preserved outside the construction footprint. Diseased trees or trees weakened by age, storm, fire, or other injury may be removed.
 - b. Clearing shall be allowed only to provide necessary access, positive site drainage, water quality BMPs, and the installation of utilities, as approved by the [Administrative Authority].
 - c. Prior to clearing or grading, suitable protective barriers, such as safety fencing, shall be erected 5 feet outside of the dripline of any tree or stand of trees to be preserved. Protective barriers shall remain so erected throughout all phases of construction. The storage of equipment, materials, debris, or fill shall not be allowed within the area protected by the barrier.
- (3) Land development shall minimize impervious cover to promote infiltration of stormwater into the ground consistent with the use or development permitted.
 - a. Grid and modular pavements shall be used for any required parking area, alley, or other low traffic driveway, unless otherwise approved by the [Administrative Authority].
 - b. Parking space size shall be 162 square feet. Parking space width shall be 9 feet; parking space length shall be 18 feet. Two-way drives shall be a minimum of 22 feet.
- (4) Notwithstanding any other provisions of this Article or exceptions or exemptions thereto, any land disturbing activity exceeding 2,500 square feet, including construction of all single-family houses, shall comply with the requirements of [local jurisdiction Erosion and Sediment Ordinance].
- (5) All on-site sewage disposal systems not requiring an NPDES permit shall be pumped out at least once every five years, in accordance with the provisions of the [jurisdiction name] Health Code.
- (6) A reserve sewage disposal site with a capacity at least equal to that of the primary sewage disposal site shall be provided, in accordance with the [jurisdiction name] Health Code. This requirement shall not apply to any lot or parcel recorded prior to October 1, 1989 if such lot or parcel is not sufficient in capacity to accommodate a reserve sewage disposal site, as determined by the local Health Department. Building or construction of any impervious surface shall be prohibited on the area of all sewage disposal sites or on an on-site sewage treatment system which operates under a permit issued by the State Water Control Board, until the structure is served by public sewer.

- (7) For any development or redevelopment, stormwater runoff shall be controlled by the use of best management practices that achieve the following:
 - a. For development, the post-development nonpoint source pollution runoff load shall not exceed the pre-development load, based on the calculated average land cover condition of the [local jurisdiction];
 - b. For sites within Intensely Developed Areas or other isolated redevelopment sites, the nonpoint source pollution load shall be reduced by at least 10 percent. The [Administrative Authority] may waive or modify this requirement for redevelopment sites that originally incorporated best management practices for stormwater runoff quality control, provided the following provisions are satisfied:
 1. In no case may the post-development non-point source pollution runoff load exceed the pre-development load;
 2. Runoff pollution loads must have been calculated and the BMPs selected for the expressed purpose of controlling nonpoint source pollution;
 3. If best management practices are structural, evidence shall be provided that facilities are currently in good working order and performing at the design levels of service. The [Administrative Authority] may require a review of both the original structural design and maintenance plans to verify this provision. A new maintenance agreement may be required to ensure compliance with this ordinance.
 - c. For redevelopment, both the pre- and post-development loadings shall be calculated by the same procedures. However, where the design data is available, the original post-development nonpoint source pollution loadings can be substituted for the existing development loadings.
- (8) Prior to initiating grading or other on-site activities on any portion of a lot or parcel, all wetlands permits required by federal, state, and local laws and regulations shall be obtained and evidence of such submitted to the [Administrative Authority], in accordance with Section 112, of this Article.
- (9) Land upon which agricultural activities are being conducted shall have a soil and water quality conservation plan. Such plan shall be based upon the Field Office Technical Guide of the U.S. Department of Agriculture Soil Conservation Service and accomplish water quality protection consistent with this ordinance. Such a plan shall be approved by the local Soil and Water Conservation District by January 1, 1995.

C. Buffer Area Requirements.

To minimize the adverse effects of human activities on the other components of Resource Protection Areas, state waters, and aquatic life, a 100-foot buffer area of vegetation that is effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff shall be

retained if present and established where it does not exist.

The buffer area shall be located adjacent to and landward of other RPA components and along both sides of any tributary stream. The full buffer area shall be designated as the landward component of the Resource Protection Area, in accordance with Sections 104 (Areas of Applicability) and 112 (Plan of Development) of this Article.

The 100-foot buffer area shall be deemed to achieve a 75 percent reduction of sediments and a 40 percent reduction of nutrients. A combination of a buffer area not less than 50 feet in width and appropriate best management practices located landward of the buffer area which collectively achieve water quality protection, pollutant removal, and water resource conservation at least the equivalent of the full 100-foot buffer area may be employed in lieu of the 100-foot buffer if approved by the [Administrative Authority] after consideration of the Water Quality Impact Assessment, in accordance with Section 111 of this Article.

The buffer area shall be maintained to meet the following additional performance standards:

- (1) In order to maintain the functional value of the buffer area, indigenous vegetation may be removed only to provide for reasonable sight lines, access paths, general woodlot management, and best management practices, as follows:
 - a. Trees may be pruned or removed as necessary to provide for sight lines and vistas, provided that where removed, they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff.
 - b. Any path shall be constructed and surfaced so as to effectively control erosion.
 - c. Dead, diseased, or dying trees or shrubbery may be removed at the discretion of the landowner, and silvicultural thinning may be conducted based upon the best available technical information.
 - d. For shoreline erosion control projects, trees and woody vegetation may be removed, necessary control techniques employed, and appropriate vegetation established to protect or stabilize the shoreline in accordance with the best available technical advice and applicable permit conditions or requirements.
- (2) When the application of the buffer areas would result in the loss of a buildable area on a lot or parcel recorded prior to October 1, 1989, the [Administrative Authority] may modify the width of the buffer area in accordance with Section 112 (Plan of Development) and the following criteria:
 - a. Modifications to the buffer areas shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities;
 - b. Where possible, an area equal to the area encroaching the buffer area shall be established elsewhere on the lot or parcel in a way to maximize water quality protection; and

- c. In no case shall the reduced portion of the buffer area be less than 50 feet in width.
- (3) Redevelopment within Intensely Developed Areas may be exempt from the buffer area, in accordance with Section 112 (Plan of Development) of this Article.
- (4) On agricultural lands the agricultural buffer area shall be managed to prevent concentrated flows of surface water from breaching the buffer area and noxious weeds from invading the buffer area. The agricultural buffer area may be reduced as follows:
 - a. To a minimum width of 50 feet when the adjacent land is implementing a federal, state, or locally-funded agricultural best management practices program, provided that the combination of the reduced buffer area and the best management practices achieve water quality protection, pollutant removal, and water resource conservation at least the equivalent of the 100 foot buffer area;
 - b. To a minimum width of 25 feet when a soil and water quality conservation plan, as approved by the local Soil and Water Conservation District, has been implemented on the adjacent land. Such plan shall be based upon the Field Office Technical Guide of the U.S. Department of Agriculture Soil Conservation Service and accomplish water quality protection consistent with this ordinance.
 - c. The buffer area is not required for agricultural drainage ditches if the adjacent agricultural land has in place best management practices in accordance with a conservation plan approved by the local Soil and Water Conservation District.

Section 111. Water Quality Impact Assessment

A. Purpose and Intent.

The purpose of the water quality impact assessment is to: (i) identify the impacts of proposed development on water quality and lands within RPAs and other environmentally-sensitive lands; (ii) ensure that, where development does take place within RPAs and other sensitive lands, it will be located on those portions of a site and in a manner that will be least disruptive to the natural functions of RPAs and other sensitive lands; (iii) to protect individuals from investing funds for improvements proposed for location on lands unsuited for such development because of high ground water, erosion, or vulnerability to flood and storm damage; (iv) provide for administrative relief from the terms of this Article when warranted and in accordance with the requirements contained herein; and (v) specify mitigation which will address water quality protection.

B. Water Quality Impact Assessment Required.

A water quality impact assessment is required for (i) any proposed development within a Resource Protection Area, including any buffer area modification or reduction as provided for in Section 110, of this Article; (ii) any development in a Resource Management Area as deemed necessary by the [Administrative Authority] due to the unique characteristics of the site or intensity of the proposed development. There shall be two levels of water quality impact assessments: a minor

assessment and a major assessment.

C. Minor Water Quality Impact Assessment.

A minor water quality impact assessment pertains only to development within a CBPA which causes no more than 5,000 square feet of land disturbance and requires any modification or reduction of the landward 50 feet of the 100 foot buffer area. A minor assessment must demonstrate through acceptable calculations that the remaining buffer area and necessary best management practices will result in removal of no less than 75 percent of sediments and 40 percent of nutrients from post-development stormwater runoff. A minor assessment shall include a site drawing to scale which shows the following:

- (1) Location of the components of the Resource Protection Area, including the 100 foot buffer area;
- (2) Location and nature of the proposed encroachment into the buffer area, including: type of paving material; areas of clearing or grading; location of any structures, drives, or other impervious cover; and sewage disposal systems or reserve drainfield sites;
- (3) Type and location of proposed best management practices to mitigate the proposed encroachment.

D. Major Water Quality Impact Assessment.

A major water quality impact assessment shall be required for any development which (i) exceeds 5,000 square feet of land disturbance within CBPAs and requires any modification or reduction of the landward 50 feet of the 100 foot buffer area; (ii) disturbs any portion of the seaward 50 feet of the 100 foot buffer area or any other component of an RPA; or (iii) is located in a RMA when deemed necessary by the [Administrative Authority]. The information required in this section shall be considered a minimum, unless the [Administrative Authority] determines that some of the elements are unnecessary due to the scope and nature of the proposed use and development of land.

The following elements shall be included in the preparation and submission of a major water quality assessment:

- (1) All of the information required in a minor water quality impact assessment, as specified in Section 111.C.;
- (2) A hydrogeological element that:
 - a. Describes the existing topography, soils, hydrology and geology of the site and adjacent lands.
 - b. Describes the impacts of the proposed development on topography, soils, hydrology and geology on the site and adjacent lands.

- c. Indicates the following:
 - 1. Disturbance or destruction of wetlands and justification for such action;
 - 2. Disruptions or reductions in the supply of water to wetland, streams, lakes, rivers or other water bodies;
 - 3. Disruptions to existing hydrology including wetland and stream circulation patterns;
 - 4. Source location and description of proposed fill material;
 - 5. Location of dredge material and location of dumping area for such material;
 - 6. Location of and impacts on shellfish beds, submerged aquatic vegetation, and fish spawning areas;
 - 7. Estimation of pre- and post development pollutant loads in runoff;
 - 8. Estimation of percent increase in impervious surface on site and type(s) of surfacing materials used;
 - 9. Percent of site to be cleared for project;
 - 10. Anticipated duration and phasing schedule of construction project;
 - 11. Listing of all requisite permits from all applicable agencies necessary to develop project.
- d. Describes the proposed mitigation measures for the potential hydrogeological impacts. Potential mitigation measures include:
 - 1. Proposed erosion and sediment control concepts; concepts may include minimizing the extent of the cleared area, perimeter controls, reduction of runoff velocities, measures to stabilize disturbed areas, schedule and personnel for site inspection;
 - 2. Proposed stormwater management system;
 - 3. Creation of wetlands to replace those lost;
 - 4. Minimizing cut and fill.

- (3) A vegetative element that:

- a. Identifies and delineates the location of all significant plant material on site, including all trees on site six inches or greater diameter at breast height or, where there are groups of trees, said stands may be outlined.
 - b. Describes the impacts the development or use will have on the existing vegetation. Information should include:
 - 1. General limits of clearing, based on all anticipated improvements, including buildings, drives, and utilities;
 - 2. Clear delineation of all trees which will be removed;
 - 3. Description of plant species to be disturbed or removed.
 - c. Describes the potential measures for mitigation. Possible mitigation measures include:
 - 1. Replanting schedule for trees and other significant vegetation removed for construction, including a list of possible plants and trees to be used;
 - 2. Demonstration that the design of the plan will preserve to the greatest extent possible any significant trees and vegetation on the site and will provide maximum erosion control and overland flow benefits from such vegetation.
 - 3. Demonstration that indigenous plants are to be used to the greatest extent possible.
- (4) A wastewater element, where applicable, that:
- a. Includes calculations and locations of anticipated drainfield or wastewater irrigation areas;
 - b. Provides justification for sewer line locations in environmentally-sensitive areas, where applicable, and describes construction techniques and standards;
 - c. Discusses any proposed on-site collection and treatment systems, their treatment levels, and impacts on receiving watercourses.
 - d. Describes the potential impacts of the proposed wastewater systems, including the proposed mitigative measures for these impacts.
- (5) Identification of the existing characteristics and conditions of sensitive lands included as components of Chesapeake Bay Preservation Areas, as defined in this Article.
- (6) Identification of the natural processes and ecological relationships inherent to the site and an assessment of the impact of the proposed use and development of land on these processes and relationships.

E. Submission and Review Requirements.

- (1) (Five) copies of all site drawings and other applicable information as required by Subsections C and D above shall be submitted to the [Administrative Authority] for review.
- (2) All information required in this section shall be certified as complete and accurate by a professional engineer or a certified land surveyor.
- (3) A minor water quality impact assessment shall be prepared and submitted to and reviewed by the [Administrative Authority] in conjunction with Section 112, (Plan of Development) of this Article.
- (4) A major water quality impact assessment shall be prepared and submitted to and reviewed by the [Administrative Authority] in conjunction with a request for rezoning, special use permit, or in conjunction with Section 112 of this Article, as deemed necessary by the [Administrative Authority].
- (5) As part of any major water quality impact assessment submittal, the [Administrative Authority] may require review by the Chesapeake Bay Local Assistance Department (CBLAD). Upon receipt of a major water quality impact assessment, the [Administrative Authority] will determine if such review is warranted and may request CBLAD to review the assessment and respond with written comments. Any comments by CBLAD will be incorporated into the final review by the [Administrative Authority], provided that such comments are provided by CBLAD within 90 days of the request.

F. Evaluation Procedure.

- (1) Upon the completed review of a minor water quality impact assessment, the [Administrative Authority] will determine that any proposed modification or reduction to the buffer area is consistent with the provisions of this Article and make a finding based upon the following criteria:
 - a. The necessity of the proposed encroachment and the ability to place improvements elsewhere on the site to avoid disturbance of the buffer area;
 - b. Impervious surface is minimized;
 - c. Proposed best management practices, where required, achieve the requisite reductions in pollutant loadings;
 - d. The development, as proposed, meets the spirit and intent of this Article;
 - e. The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.

- (2) Upon the completed review of a major water quality impact assessment, the [Administrative Authority] will determine whether or not the proposed development is consistent with the spirit and intent of this Article and make a finding based upon the following criteria:
- a. Within any RPA, the proposed development is water-dependent;
 - b. The percentage of existing wetlands disturbed by the development. The number of square feet or acres to be disturbed;
 - c. The development will not result in significant disruption of the hydrology of the site;
 - d. The development will not result in severe degradation to aquatic vegetation or life;
 - e. The development will not result in unnecessary destruction of plant materials on site;
 - f. Proposed erosion and sediment control concepts are adequate to achieve the reductions in runoff and prevent off-site sedimentation;
 - g. Proposed stormwater management concepts are adequate to control the stormwater runoff to achieve "no net increase" in pollutant loadings;
 - h. Proposed revegetation of disturbed areas will provide optimum erosion and sediment control benefits;
 - j. The design and location of any proposed drainfield will be in accordance with the requirements of Section 110.
 - k. The development is consistent with the spirit and intent of the Overlay District;
 - l. The relationship and cumulative effect of the proposed development on water quality and Chesapeake Bay Preservation Areas has been considered.
- (3) The [Administrative Authority] shall require additional mitigation where potential impacts have not been adequately addressed. Evaluation of mitigation measures will be made by the [Administrative Authority] based on the criteria listed above in subsections (1) and (2).
- (4) The [Administrative Authority] shall find the proposal to be inconsistent with the purpose and intent of this Article when the impacts created by the proposal cannot be mitigated. Evaluation of the impacts will be made by the [Administrative Authority] based on the criteria listed in subsections (1) and (2).

Section 112. Plan of Development Process.

Any development or redevelopment exceeding 2500 square feet of land disturbance shall be accomplished through a plan of development process prior to any clearing or grading of the site or the issuance of any building permit, to assure compliance with all applicable requirements of this Article.

A. Required Information.

In addition to the requirements of [reference site plan ordinance] of this [Code, Chapter, Appendix, etc.] or the requirements of Section [subdivision plats] of the [jurisdiction name] Subdivision Ordinance, the plan of development process shall consist of the plans and studies identified below. These required plans and studies may be coordinated or combined, as deemed appropriate by the [Administrative Authority]. The [Administrative Authority] may determine that some of the following information is unnecessary due to the scope and nature of the proposed development.

The following plans or studies shall be submitted, unless otherwise provided for:

- (1) A site plan in accordance with the provisions of [reference site plan ordinance] of this [Code, Chapter, Appendix, etc.]; or a subdivision plat in accordance with the provisions of Section [subdivision plats] of the [jurisdiction name] Subdivision Ordinance;
- (2) An environmental site assessment;
- (3) A landscaping plan;
- (4) A stormwater management plan;
- (5) An erosion and sediment control plan in accordance with the provisions of Section [local erosion & sediment control ordinance] of this [Chapter, Appendix, etc.].

B. Environmental Site Assessment.

An environmental site assessment shall be submitted in conjunction with preliminary site plan or preliminary subdivision plan approval.

- (1) The environmental site assessment shall be drawn to scale and clearly delineate the following environmental features:
 - a. Tidal wetlands;
 - b. Tidal shores;
 - c. Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or tributary streams;
 - d. [Other lands] (specified as an RPA feature at local discretion);

- e. A 100 foot buffer area located adjacent to and landward of the components listed in subsections a. through d. above, and along both sides of any tributary stream;
 - f. Other sensitive environmental features as determined by the [Administrative Authority].
- (2) Wetlands delineations shall be performed consistent with the procedures specified in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands, 1989.
 - (3) The environmental site assessment shall delineate the site-specific geographic extent of the Resource Protection Area.
 - (4) The environmental site assessment shall be drawn at the same scale as the preliminary site plan or subdivision plat, and shall be certified as complete and accurate by a professional engineer or a certified land surveyor. This requirement may be waived by the [Administrative Authority] when the proposed use or development would result in less than 5,000 square feet of disturbed area.

C. Landscaping Plan.

A landscaping plan shall be submitted in conjunction with site plan approval or as part of subdivision plat approval. No clearing or grading of any lot or parcel shall be permitted without an approved landscaping plan.

Landscaping plans shall be prepared and/or certified by design professionals practicing within their areas of competence as prescribed by the Code of Virginia.

(1) Contents of the Plan.

- a. The landscaping plan shall be drawn to scale and clearly delineate the location, size, and description of existing and proposed plant material. All existing trees on the site 6 inches or greater diameter at breast height (DBH) shall be shown on the landscaping plan, or where there are groups of trees, said stands may be outlined instead. The specific number of trees 6 inches or greater DBH to be preserved outside of the construction footprint shall be indicated on the plan. Trees to be removed to create a desired construction footprint shall be clearly delineated on the landscaping plan.
- b. Any required buffer area shall be clearly delineated and any plant material to be added to establish or supplement the buffer area, as required by this Article, shall be shown on the landscaping plan.
- c. Within the buffer area, trees to be removed for sight lines, vistas, access paths, and best management practices, as provided for in this Article, shall be shown on the plan. Vegetation required by this Article to replace any existing trees within the buffer area shall be also be shown on the landscaping plan.

- d. Trees to be removed for shoreline stabilization projects and any replacement vegetation required by this Article shall be shown on the landscaping plan.
- e. The plan shall depict grade changes or other work adjacent to trees which would affect them adversely. Specifications shall be provided as to how grade, drainage, and aeration would be maintained around trees to be preserved.
- f. The landscaping plan will include specifications for the protection of existing trees during clearing, grading, and all phases of construction.

(2) Plant Specifications.

- a. All plant materials necessary to supplement the buffer area or vegetated areas outside the construction footprint shall be installed according to standard planting practices and procedures.
- b. All supplementary or replacement plant materials shall be living and in a healthy condition. Plant materials shall conform to the standards of the most recent edition of the American Standard for Nursery Stock, published by the American Association of Nurserymen.
- c. Where areas to be preserved, as designated on an approved landscaping plan, are encroached, replacement of existing trees and other vegetation will be achieved at a ratio of 3 planted trees to 1 removed. Replacement trees shall be a minimum 3 1/2 inches DBH at the time of planting.

(3) Maintenance.

- a. The applicant shall be responsible for the maintenance and replacement of all vegetation as may be required by the provisions of this Article.
- b. In buffer areas and areas outside the construction footprint, plant material shall be tended and maintained in a healthy growing condition and free from refuse and debris. Unhealthy, dying, or dead plant materials shall be replaced during the next planting season, as required by the provisions of this Article.

D. Stormwater Management Plan.

A stormwater management plan shall be submitted as part of the plan of development process required by this Article and in conjunction with site plan or subdivision plan approval.

(1) Contents of the Plan.

The stormwater management plan shall contain maps, charts, graphs, tables, photographs, narrative descriptions, explanations, and citations to supporting references as appropriate to communicate the information required by this Article. At a minimum,

the stormwater management plan must contain the following:

- a. Location and design of all planned stormwater control devices;
- b. Procedures for implementing non-structural stormwater control practices and techniques;
- c. Pre- and post-development nonpoint source pollutant loadings with supporting documentation of all utilized coefficients and calculations;
- d. For facilities, verification of structural soundness, including a Professional Engineer or Class IIIB Surveyor Certification;
- (2) Site specific facilities shall be designed for the ultimate development of the contributing watershed based on zoning, comprehensive plans, local public facility master plans, or other similar planning documents.
- (3) All engineering calculations must be performed in accordance with procedures outlined in the current edition of the Local Assistance Manual, Virginia Erosion and Sediment Control Handbook, Virginia Department of Transportation Drainage Manual, or any other good engineering methods deemed appropriate by the [Administrative Authority].
- (4) The plan shall establish a long-term schedule for inspection and maintenance of stormwater management facilities that includes all maintenance requirements and persons responsible for performing maintenance. If the designated maintenance responsibility is with a party other than the [local jurisdiction] then a maintenance agreement shall be executed between the responsible party and the [local jurisdiction].

E. Erosion and Sediment Control Plan.

An erosion and sediment control plan shall be submitted that satisfies the requirements of this Article and in accordance with Section [local jurisdiction erosion & sediment control requirements], in conjunction with site plan or subdivision plan approval.

F. Final Plan.

Final plans for property within CBPAs shall be final plats for land to be subdivided or site plans for land not to be subdivided as required in [reference site plan ordinance] of this [Code, Chapter, Appendix, etc.]

- (1) Final plans for all lands within CBPAs shall include the following additional information:
 - a. The delineation of the Resource Protection Area boundary;
 - b. The delineation of required buffer areas;

- c. All wetlands permits required by law;
- d. A maintenance agreement as deemed necessary and appropriate by the [Administrative Authority] to ensure proper maintenance of best management practices in order to continue their functions.

(2) Installation and Bonding Requirements.

- a. Where buffer areas, landscaping, stormwater management facilities or other specifications of an approved plan are required, no certificate of occupancy shall be issued until the installation of required plant materials or facilities is completed, in accordance with the approved site plan.
- b. When the occupancy of a structure is desired prior to the completion of the required landscaping, stormwater management facilities, or other specifications of an approved plan, a certificate of occupancy may be issued only if the applicant provides to [local jurisdiction] a form of surety satisfactory to the [Administrative Authority] in amount equal to the remaining plant materials, related materials, and installation costs of the required landscaping or facilities and/or maintenance costs for any required stormwater management facilities.
- c. All required landscaping shall be installed and approved by the first planting season following issuance of a certificate of occupancy or the surety may be forfeited to the [local jurisdiction].
- d. All required stormwater management facilities or other specifications shall be installed and approved within 18 months of project commencement. Should the applicant fail, after proper notice, to initiate, complete or maintain appropriate actions required by the approved plan, the surety may be forfeited to [local jurisdiction]. The [local jurisdiction] may collect from the applicant the amount by which the reasonable cost of required actions exceeds the amount of the surety held.
- e. After all required actions of the approved site plan have been completed, the applicant must submit a written request for a final inspection. If the requirements of the approved plan have been completed to the satisfaction of the [Administrative Authority], such unexpended or unobligated portion of the surety held shall be refunded to the applicant or terminated within 60 days following the receipt of the applicant's request for final inspection. The [Administrative Authority] may require a certificate of substantial completion from a Professional Engineer or Class III B Surveyor before making a final inspection.

G. Administrative Responsibility.

Administration of the plan of development process shall be in accordance with [reference site plan ordinance] of this [Code, Chapter, Appendix, etc.] or Section [subdivision plats] of the [local jurisdiction] Subdivision Ordinance.

H. Denial of Plan, Appeal of Conditions or Modifications.

In the event the final plan or any component of the plan of development process is disapproved and recommended conditions or modifications are unacceptable to the applicant, the applicant may appeal such administrative decision to the Planning Commission. In granting or denying an appeal, the Planning Commission must find such plan to be in accordance with all applicable ordinances and include necessary elements to mitigate any detrimental impact on water quality and upon adjacent property and the surrounding area, or such plan meets the purpose and intent of the performance standards in this Article. If the Planning Commission finds that the applicant's plan does not meet the above stated criteria, they shall deny approval of the plan.

Section 113. Nonconforming Use and Development Waivers.

The lawful use of a building or structure which existed on [date of adoption] or which exists at the time of any amendment to this Article, and which is not in conformity with the provisions of the Overlay District may be continued in accordance with Section [reference nonconformities] of this [Chapter, Appendix, etc.].

No change or expansion of use shall be allowed with the exception that:

- (1) The [Administrative Authority] may grant a nonconforming use and development waiver for structures on legal nonconforming lots or parcels to provide for remodeling and alterations or additions to such nonconforming structures provided that:
 - a. There will be no increase in nonpoint source pollution load;
 - b. Any development or land disturbance exceeding an area of 2500 square feet complies with all erosion and sediment control requirement of this Article.
- (2) An application for a nonconforming use and development waiver shall be made to and upon forms furnished by the [Administrative Authority] and shall include for the purpose of proper enforcement of this Article, the following information:
 - a. Name and address of applicant and property owner;
 - b. Legal description of the property and type of proposed use and development;
 - c. A sketch of the dimensions of the lot or parcel, location of buildings and proposed additions relative to the lot lines, and boundary of the Resource Protection Area;
 - d. Location and description of any existing private water supply or sewage system.
- (3) A nonconforming use and development waiver shall become null and void twelve months from the date issued if no substantial work has commenced.

Section 114. Exemptions.

A. Exemptions for Utilities.

Construction, installation, and maintenance of water, sewer, and local gas lines shall be exempt from the Overlay District provided that:

- a. To the degree possible, the location of such utilities and facilities should be outside Resource Protection Areas;
- b. No more land shall be disturbed than is necessary to provide for the desired utility installation;
- c. All such construction, installation, and maintenance of such utilities and facilities shall be in compliance with all applicable state and federal requirements and permits and designed and conducted in a manner that protects water quality; and
- d. Any land disturbance exceeding an area of 2,500 square feet complies with all [jurisdiction name] erosion and sediment control requirements.

B. Exemptions for Silvicultural Activities.

Silvicultural activities are exempt from the requirements of this Article provided that silvicultural operations adhere to water quality protection procedures prescribed by the Department of Forestry in its "Best Management Practices Handbook for Forestry Operations."

C. Exemptions in Resource Protection Areas.

The following land disturbances in Resource Protection Areas may be exempted from the Overlay District: (i) water wells; (ii) passive recreation facilities such as boardwalks, trails, and pathways; and (iii) historic preservation and archaeological activities, provided that it is demonstrated to the satisfaction of the [Administrative Authority] that:

- (1) Any required permits, except those to which this exemption specifically applies, shall have been issued;
- (2) Sufficient and reasonable proof is submitted that the intended use will not deteriorate water quality;
- (3) The intended use does not conflict with nearby planned or approved uses; and
- (4) Any land disturbance exceeding an area of 2500 square feet shall comply with all [jurisdiction name] erosion and sediment control requirements.

Section 115. Exceptions.

A. A request for an exception to the requirements of this Overlay District shall be made in writing to the [Administrative Authority]. It shall identify the impacts of the proposed exception on water quality and on lands within the Resource Protection Area through the performance of a water quality impact assessment which complies with the provisions of Section 111.

B. The [Administrative Authority] shall review the request for an exception and the water quality impact assessment and may grant the exception with such conditions and safeguards as deemed necessary to further the purpose and intent of this Article if the [Administrative Authority] finds:

- (1) Granting the exception will not confer upon the applicant any special privileges that are denied by this Article to other property owners in the Overlay District;
- (2) The exception request is not based upon conditions or circumstances that are self-created or self-imposed, nor does the request arise from conditions or circumstances either permitted or non-conforming that are related to adjacent parcels;
- (3) The exception request is the minimum necessary to afford relief;
- (4) The exception request will be in harmony with the purpose and intent of the Overlay District, and not injurious to the neighborhood or otherwise detrimental to the public welfare; and
- (5) Reasonable and appropriate conditions are imposed which will prevent the exception request from causing a degradation of water quality.

C. If the [Administrative Authority] cannot make the required findings or refuses to grant the exception, the [Administrative Authority] shall return the request for an exception together with the water quality impact assessment and the written findings and rationale for the decision to the applicant, with a copy to the Board of Zoning Appeals. The applicant may then apply to the Board of Zoning Appeals for a variance as provided in Section [reference variances] of the Zoning Ordinance.

D. The Board of Zoning Appeals shall consider the water quality impact assessment and the findings and rationale of the [Administrative Authority] in determining harmony with the intended spirit and purpose of this Article.